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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,223	02/14/2006	Wolfgang Zirwas	14541680	6270
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STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			EXAMINER AKBAR, MUHAMMAD A	
			ART UNIT 2618	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/568,223

Applicant(s)

ZIRWAS, WOLFGANG

Examiner

Muhammad Akbar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 12-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/14/06, 5/17/06, 8/17/06</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification Objection***

1. It is noted that applicant described in the Fig.1 with component named P (i.e. channel parameter) wherein mentioned in the specification " channel parameter R" (see paragraph [0034] (line 10)). Examiner believed it is a typo and should be replaced with -- channel parameter P-- ". Appropriate correction is required.

### ***Claim Objection***

2. Claims 13-20 are objected to because of the following informalities:

Regarding claim 13-20, the phrase "A method " appears to be "The method".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 16, recites the limitation " opposite mathematical operation " in (line 3). However, examiner carefully reviewed the submitted specification and could not find claimed limitations "opposite mathematical operation" in the disclosure, and opposite

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mathematical operation makes claim limitations confusion, indefinite and unclear.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim(s) 12-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Bergel (U.S. Pub. No. 2003/0017835 A1).

Re claim 12, Bergel discloses a method for operating a radio communication system (see fig.1), comprising:

receiving a signal in a receiver station (i.e. mobile transceiver, 14 of fig.1) by way of a first transmitting channel ( 32a of fig.1) from a sending station (i.e. base station transceiver, 12 of fig.1) (see fig.1, para [0019];[0020]);

determining by the receiver station (i.e. mobile transceiver, 14 of fig.1), a channel parameter (i.e. channel prediction information phase, amplitude) of the first transmitting channel (32a of fig.1) (see fig.1, 4A, para [0021],[0047]); and

adjusted a symbol parameter (i.e. channel prediction information data, calculate weight, estimated channel algorithm, adjusted transmission pattern) of a first data symbol (i.e. feedback data symbol generated by the feedback data generator 60 of fig.2) which is transmitted from the receiver station(14) to the sending station (i.e. base station transceiver, 12 of fig.1) by the way of a second transmitting channel (i.e. feedback transmission channel ,35 of fig.1) as a function of the channel parameter (i.e. based on the channel prediction parameters ) for communication to the sending station (i.e. base station transceiver, 12 of fig.1) (see fig.1,2,4, para [0023];[0024]).

Re claim 13, as discussed above with respect to claim 12, Bergel further discloses transmitting the data symbol over the feedback channel (35) from the receiver station (i.e. mobile transceiver, 14 of fig.1) to the sending station (i.e. base station transceiver, 12 of fig.1); and ascertain at the sending station the channel parameter of the first transmitting channel (32a of fig.1) determined by the receiver station (14), based on the prediction data symbol received at the sending station(i.e. base station transceiver, 12 of fig.1) (see fig.1, para [0021];[0024],[0032]).

Re claim 14,15, 16,as discussed above with respect to claim 13, Bergel further discloses the channel parameter of the first transmitting channel (32a of fig.1) is at least one of a phase parameter and an amplitude parameter (see para [0024]); and adjusted includes changed the symbol parameter (prediction information data weight calculated and estimated ) of the first data symbol which is transmitted from the receiver station ( mobile transceiver 14) to the sending station (i.e. base station transceiver, 12 of fig.1)

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by at least one of addition and subtraction ( by applying algorithm calculation) of a value of the channel parameter of the first transmitting channel (see fig.1,2,4, para [0024];[0032]).

Re claim 16, as discussed above with respect to claim 13,14,15, Bergel further discloses adjusted includes changed the symbol parameter (prediction information data weight calculated and estimated ) of the second data symbol (channel estimation of second prediction data) which is transmitted from the receiver station ( mobile transceiver 14) to the sending station (i.e. base station transceiver, 12 of fig.1) over the different antenna by at least one of addition and subtraction ( by applying algorithm calculation of antenna weight value for future state of channel estimation of channel parameter) of a value of the channel parameter of the first transmitting channel (see fig.1,2,4, para [0026];[0032],[0047]).

Re claim 17,18, as discussed above with respect to claim 16, Bergel further discloses the first and second data symbols transmitted from the receiver station ( mobile transceiver 14 of fig.1) are pilot symbols over pilot channel (see fig.1,2,4, para [0006],[0021];[0024]); and the first and second data symbols transmitted from the receiver station (mobile transceiver 14 of fig.1) are user data of channel estimation (see fig.1,2,4, para [0021];[0024]).

Re claim 19, as discussed above with respect to claim 16, Bergel further discloses a plurality of available transmitting channels (channel 32a, 32b) exist for transmission from the sending station (i.e. base station transceiver, 12 of fig.1) to the receiver station (i.e. mobile station transceiver, 14 of fig.1) and said receiving, determining, adjusting, transmitting and ascertaining are repeated using each of the available transmitting channels as the first transmitting channel (see fig.1,2,4, para [0021];[0026]).

Re claim 20, as discussed above with respect to claim 19, Bergel further discloses the receiver station has a receiving antenna (26 of fig.1) and the sending station (i.e. base station transceiver, 12 of fig.1) has a plurality of sending antennas (plurality antennas 30(1)...30(m) of fig.1) and one of the first transmitting channels (32a of fig.1) is in each case situated between one of the sending antennas (30(1) ) and one of the receiving antennas (26) (see fig.1,5, para [0022],[0023]).

Re claim 21, Bergel discloses a receiver station (i.e. mobile transceiver, 14 of fig.1) for radio communication system having a sending station (i.e. base station transceiver, 12 of fig.1) (see fig.1, para [0019];[0020]) comprising:

receiving unit (i.e. mobile transceiver, 45 of fig.2) receiving a signal from a sending station (i.e. base station transceiver, 12 of fig.1) by way of a first transmitting channel ( 32a of fig.1) (see fig.1, para [0019];[0020]);

determination unit (i.e. channel control unit 24 of fig.2) by the receiver station (i.e. mobile transceiver, 14 of fig.1), a channel parameter (i.e. channel prediction information phase, amplitude) of the first transmitting channel (32a of fig.1) (see fig.1, 4A, para [0021],[0047]); and

adjusting unit (i.e. channel estimator unit, 55 of fig.2) changing data symbol parameter (i.e. channel prediction information data, calculate weight, estimated channel algorithm, adjusted transmission pattern) of a first data symbol (i.e. feedback data symbol generated by the feedback data generator 60 of fig.2) which is transmitted from the receiver station(14) to the sending station (i.e. base station transceiver, 12 of fig.1) by the way of a second transmitting channel (i.e. feedback transmission channel ,35 of fig.1) as a function of the channel parameter (i.e. based on the channel prediction parameters ) for communication to the sending station (i.e. base station transceiver, 12 of fig.1) (see fig.1,2,4, para [0023];[0024],[0035],[0058]).

Re claim 22, Bergel discloses a sending station (i.e. base station , 12 of fig.1) for radio communication system having a receiver station (i.e. mobile transceiver, 14 of fig.1) (see fig.1, para [0019];[0020]) comprising:

transmitter unit (i.e. mobile transceiver, 12 of fig. 1) sending a signal by way of a first transmitting channel ( 32a of fig.1) to the mobile station (14 of fig.1) (see fig.1, para [0019];[0020]);

a receiver unit (217 of fig.6) receiving signal from the receiver station (14) at least one data symbol having a symbol parameter (feedback information) adjusted for



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communication of a channel parameter of the first transmitting channel (32a of fig.1) as a function of the at least one channel parameter (data symbol, channel weight); an ascertainment unit (220 of fig.6) ascertaining the channel parameter (weight generation, calculation) based on the at least one data symbol (feedback data information) received from the receiver unit (i.e. mobile station 14 of fig.1) (see fig.1,2,4B,6 and para [0024],[0033],[0053],[0055]).

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (7.96)

The following patent are cited to further show the state of the art with respect to clips and bookmarks in general:

U.S. Patent No. 6,646,993 to Davies et al teaches communication apparatus and method of format application .

U.S. PG. Pub. 2003/0036359 A1 to Dent et al teaches mobile station loop-back signal processing between base station and mobile station

U.S. PG. Pub. 2004/0203383 A1 to Kelton et al teaches system provided data to multiple devices.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Muhammad Akbar whose telephone number is (571)-

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270-1218. The examiner can normally be reached on Monday- Thursday (8:00 A.M.- 5:00P.M).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lana Le can be reached on 571-272-7891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MA



12-26-07

LANA LE  
PRIMARY EXAMINER